



January 30, 2004

Dear Interested Party,

I am pleased to present the Final Environmental Impact Statement for the Lake Whatcom Landscape Plan. In response to public concern regarding water quality and public safety in and around Lake Whatcom, the 2000 Legislature directed the Department of Natural Resources to complete a landscape plan for state-owned trust lands in the Lake Whatcom Watershed.

Since that time, the Department has worked with the Lake Whatcom DNR Landscape Planning Committee to identify a management direction that appropriately balances environmental protection and public safety considerations with our economic obligations to trust beneficiaries. I am grateful to the Committee members for their generous contributions of time and ideas to this process, and extend the Department's thanks. I also wish to thank the many citizens, landowners, organizations, tribes and agencies who participated in public meetings and provided insightful comments concerning the September 2002 Preliminary Draft Environmental Impact Statement and the September 2003 Draft Environmental Impact Statement.

The advice and recommendations of the Committee and the public were extremely useful and fully considered in developing the Final Preferred Alternative presented in this FEIS. DNR believes that the Final Preferred Alternative outlines an approach to simultaneously providing for good water quality, stable slopes, protection of tribal cultural resources, and trust income through the management of the state-owned trust lands in the Lake Whatcom Watershed.

This FEIS is being released on January 30, 2004. The landscape plan will be presented to and discussed with the Board of Natural Resources in the near future. When the landscape plan is adopted we look forward to working cooperatively with the local community to assure open communications and a smooth implementation.

William J. Wallace
DNR Northwest Region Manager
SEPA Responsible Official

Final Environmental Impact Statement

**Lake Whatcom Landscape Plan
January 30, 2004**

Washington State Department of Natural Resources

This Final Environmental Impact Statement consists of:

- **the Draft Environmental Impact Statement (DEIS), published on September 8, 2003 (which is incorporated by reference);**
- **a revised fact sheet;**
- **responses to public comments on the DEIS; and**
- **related appendices.**

(See WAC 197-11-560(5).)

Fact Sheet

Proposed Action

The Washington State Department of Natural Resources (DNR) is proposing a landscape plan for approximately 15,700 acres of forested state trust lands in the Lake Whatcom Planning Area.

Tentative Date of Implementation

The Department will submit the Final Environmental Impact Statement (FEIS) for the Lake Whatcom Landscape Plan to the Board of Natural Resources after it is released. Implementation will follow Board approval, which will occur no sooner than March 2004.

Lead Agency

DNR is the lead agency. The responsible official is William Wallace, Region Manager, DNR Northwest Region, Sedro-Woolley, Washington. For more information please contact William Wallace or project manager Jeff May at (360) 856-3500.

Required Licenses

No licenses are required to prepare and implement the Landscape Plan Proposal. Site-specific activities conducted in implementation of the plan may require Forest Practices Permits, Hydraulics Permits and/or other licenses or permits.

Author and Principal Contributors

The plan alternatives were prepared by DNR and the Lake Whatcom DNR Landscape Planning Committee, with facilitation provided by Resolution Services, as contracted by DNR. The FEIS was prepared by Jeff May, Northwest Region (landscape plan project manager); Barbara MacGregor, Communications Group (EIS project manager); Stephen Saunders, Asset Management and Protection Division (SEPA lead); and Anne Sharar, Asset Management and Protection (writer). A list of participants and contributors, including scientific and technical analysts, is contained in Appendix A.

Date of Issue

The Lake Whatcom Final Environmental Impact Statement and Addendum is being released on January 30, 2004.

The Lake Whatcom Draft Environmental Impact Statement was released on September 8, 2003 and the comment period closed on October 8, 2003.

Date of Next Action

DNR expects to present the Final EIS to the Board of Natural Resources in March 2004 or as soon thereafter as can be scheduled.

The Preferred Alternative and other draft alternatives reviewed in this process are considered “non-project proposals” under WAC 197-11-442. The Preferred Alternative describes a potential landscape plan for state trust lands in the Lake Whatcom Planning Area. DNR recognizes that subsequent environmental reviews of proposed site-specific actions will be necessary in the future. DNR has not identified specific future activities or times but will comply with SEPA’s phased review procedures.

Location of Forest Resource Plan, Habitat Conservation Plan, DEIS, PDEIS and Supporting Documentation

The Lake Whatcom FEIS is available on the Internet at DNR’s home page, <http://www.dnr.wa.gov>. Select the Lake Whatcom Landscape Plan link. Print copies of the FEIS are available to read at the Bellingham Library in Bellingham and the Washington State Library in Tumwater. Requests for mailed CDs or print copies should be directed to Barbara MacGregor, DNR Communications, P.O. Box 47003, Olympia, WA 98504-7003; phone (360) 902-1323. The Lake Whatcom DEIS, released September 8, 2003, and the PDEIS, issued September 13, 2002, also is available on the Internet at DNR’s home page.

The 1992 Forest Resource Plan, Habitat Conservation Plan, Engrossed Second Substitute Bill 6731 (E2SSB 6731) and the DEIS and PDEIS, upon which the Lake Whatcom Landscape Plan has been based, are available for review at the DNR Northwest Region Office and the SEPA Center, Department of Natural Resources, 1111 Washington St. SE, Olympia, Washington.

Cost per Copy

Copies of the Lake Whatcom Landscape Plan FEIS are available for downloading at no charge from the Internet address shown above. A limited number of print copies and computer CDs will be available at no charge. After these are distributed, additional copies will be available for the cost of printing or CD production, per RCW 42.17.

Table of Contents

Project Description	1
Discussion of Changes to the Preferred Alternative	3
Final Preferred Alternative.....	5
Summary of Public Comment Process.....	17
Appendices:	
A. Participants and Contributors.....	1
B. Distribution List.....	2
C. DEIS Public Comments and DNR Responses	3
D. DEIS Commenters List.....	53
E. Legislative Bill E2SSB 6731	68
F. Committee's Proposed Preferred Alternative.....	72
Committee Information Regarding Its Proposed Preferred Alternative	85
1. Objective 16 Rationale.....	85
2. Objective 22 Rationale.....	86
3. Objective 22, Justification of 3rd Strategy.....	87
4. Objective 22, Minority Opinion Opposing 3rd Strategy	88
DNR Response to Committee's Proposed Preferred Alternative.....	89
G. Landscape Plan Implementation Reference Materials	92
a. Definition of Unstable and Potentially Unstable Slopes and description of how to use maps.....	92
b. Map G-1: High and Moderate Hazard Mass Wasting Units	94
c. Map G-2: Slope Stability Sensitive Areas.....	95
d. Map G-3: Slope Stability and Stream Classification	96
e. Map S-1: Visual Impacts.....	97
f. Map: FEIS Preferred Alternative	98
g. Tribal Cultural Resources Matrix for Lake Whatcom Planning Area	99
h. Projected Harvest Level – 200 year average	105
i. Projected Harvest Level – 20 year average	105

Project Description

The Washington State Department of Natural Resources is proposing a landscape plan for approximately 15,700 acres of forested state trust lands in the Lake Whatcom Landscape Planning Area. The department needs to prepare a landscape plan to guide both short-term and long-term management for those state trust lands, consistent with DNR's Forest Resource Plan (1992), Habitat Conservation Plan (1997), Forest Practices Rules and Engrossed Second Substitute Senate Bill 6731 (E2SSB 6731) [2000 Washington Laws Chapter 205], which was passed in 2000. The purpose of the landscape plan is to provide a set of management strategies that will ensure environmental protection on DNR-managed lands and contribute to water quality in the planning area while also preserving the economic viability of those same lands for the long-term benefit of trust beneficiaries.

Project Area

Lands covered by this landscape plan: This landscape plan applies to state trust lands within the planning area that are owned by the State of Washington and managed by the Department of Natural Resources. This includes trust lands within the Lake Whatcom watershed boundary and trust lands west of Cain and Reed lakes. Isolated parcels outside but close to the watershed boundary are included in this plan in an effort to consolidate management efforts. This plan covers approximately 15,515 acres of the total 15,703 acres of DNR-managed land in the planning area.

This plan does not cover 189 acres of DNR-managed lands within the planning area. Two parcels totaling 50 acres of Common School trust land by Strawberry Point (zoned rural residential) and the 139 acre Lake Louise Natural Resources Conservation Area (NRCA) are managed under different strategies than those addressed under the landscape plan. This plan does not affect activities on private land, land managed by municipal governments or lands managed by other state agencies.

Planning Process

A detailed summary of landscape planning initiatives for the Lake Whatcom watershed, from the late 1980s until September 2002, is presented in the Preliminary Draft Environmental Impact Statement (PDEIS), pages 21-24. Approximately 7,500 acres of forestland in the Lake Whatcom watershed were added to the trust land ownership under DNR management through a complex land exchange with the Trillium Corporation, initiated by DNR at the request of Whatcom County. This exchange was completed and approved by the Board of Natural Resources in January 1993.

The current effort to develop a landscape plan, which has culminated in this FEIS, reflects direction from the legislature in E2SSB 6731. This bill directed DNR to work with the Lake

Whatcom DNR Landscape Planning Committee and many others to develop landscape plan alternatives that would address the following issues:

- Riparian zones along all streams, based on management standards that address protection of water quality and riparian habitat.
- Road construction in areas with unstable slopes.
- A road management plan for the watershed.

In addition to working with the Committee, DNR consulted with other major forest landowners, the Lake Whatcom Management Committee, Forestry Forum, watershed residents, other organizations, the Nooksack and Lummi Tribes, and state and local elected officials. Working together, DNR and the Lake Whatcom DNR Landscape Planning Committee developed objectives for the watershed, crafted various management scenarios that were modeled to show the economic implications to trust revenues, and formalized five landscape plan alternatives. These alternatives were analyzed by DNR and presented in the September 2002 PDEIS. Comments were received from 102 individuals and organizations and were addressed in the March 2003 Response Summary, concluding the expanded scoping phase of the landscape planning process.

DNR and the Committee continued to meet from January through April 2003 and considered the PDEIS public comments as they jointly developed a Preferred Alternative. The Preferred Alternative was analyzed and presented in the September 2003 DEIS, with the PDEIS No Action Alternative and, at the Committee's request, PDEIS Alternative 3. A public comment period ended October 8, 2003; DNR received comments from approximately 160 parties. Responses to public comments on the DEIS are found in Appendix C of this FEIS and Addendum.

Discussion of Changes to the Preferred Alternative

DNR and the Lake Whatcom DNR Landscape Planning Committee met in October and November 2003 to review comments and consider changes to the preferred alternative for the Landscape plan. After reviewing all public comments to the Draft EIS, DNR and the Committee both agreed there was no need to change strategies for 19 of the 21 Objectives in the DEIS Preferred Alternative.

As a result of review of public comments, discussions with the Committee and recommendations from EIS analysts, the following changes to the Draft EIS Preferred Alternative are included in Objectives 16 and 22 of the Final EIS Preferred Alternative.

Objective 16

The underlined text has been added to the first strategy of this Objective.

Objective 16	Consider opportunities to generate revenue from oil and gas exploration.
	<p><u>Strategies:</u></p> <ul style="list-style-type: none">• <u>Where DNR controls the oil, gas, and mineral rights,</u> limit exploratory drill sites to surface locations outside the watershed. Subsurface diagonal drilling allowed.• If sufficient oil or gas reserves are found, allow development of the resource if compatible with other landscape objectives. Production drill sites shall be limited to surface locations outside the watershed. Subsurface diagonal drilling allowed.

This language was added to clarify that this strategy only applies where DNR actually controls the oil, gas and mineral rights. DNR does not hold the mineral and oil and gas rights under a number of parcels where there is trust ownership of the surface within the watershed. There is trust ownership of both surface and mineral rights for 11,988 acres, and surface ownership without mineral rights for 3,715 acres. In cases where another party controls the mineral rights, DNR cannot prohibit exploration under these parcels. The Lake Whatcom Landscape Plan and the legislation that gave rise to it concern activities only on state-owned lands.

Objective 22

An additional Objective, Number 22, with two strategies, has been added to the Draft EIS Preferred Alternative. These additions are shown in underlined text below.

Objective 22	<u>Develop an inter-jurisdictional committee to work with DNR to implement the landscape plan.</u>
	<p><u>Strategies:</u></p> <ul style="list-style-type: none">• <u>The DNR and the Lake Whatcom DNR Landscape Planning Committee requests the City of Bellingham, Whatcom County, and Water District 10 appoint members as they see fit as an interim inter-jurisdictional committee,</u>

	<p><u>consistent with E2SSB 6731, to represent the local needs for resource protection wherever review by, or consultation with, the inter-jurisdictional committee is referred to in this document.</u></p> <ul style="list-style-type: none"> • <u>The DNR will work with the Lake Whatcom Management Committee to develop and sign an agreement regarding the relationship between the signatories and the inter-jurisdictional committee in implementing the landscape plan. Discussions will begin as soon as mutually agreed upon after adoption of the landscape plan.</u>
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Objective 22 was added to provide clarity regarding the purpose of the inter-jurisdictional committee that will be working with DNR during implementation of the Landscape Plan. The first strategy provides guidance and common understanding between DNR and the Committee regarding formation of the inter-jurisdictional committee. The second strategy expresses DNR's commitment to work with the local jurisdictions through the Lake Whatcom Management Committee to formally agree on the inter-relationship between DNR, the inter-jurisdictional committee and the Lake Whatcom Management Committee.

Objectives 1, 3 and 4, as analyzed for the DEIS, all contained references to the inter-jurisdictional committee in one or more of their strategies. Consequently, DNR considers the addition of Objective 22 a matter of clarification to aid in the implementation of the Landscape Plan rather than a change to the Preferred Alternative with potential environmental impact.

No other changes, besides those described above, were made to the Draft EIS Preferred Alternative to develop the Preferred Alternative presented in this FEIS. Other changes, proposed in public comments or by the Committee, were considered but not adopted. Discussion of these proposals can be found in Appendix C, Summary of DEIS Comments and Responses to Them, and Appendix F, Lake Whatcom DNR Landscape Planning Committee's Proposed Preferred Alternative.

FEIS Preferred Alternative for the Lake Whatcom Landscape Plan

The plain text below is the DEIS Preferred Alternative. Changes are shown in underlined text. These changes include the additions to the DEIS Preferred Alternative in the wording of the first strategy for Objective 16, and Objective 22 in its entirety. The DEIS Preferred Alternative with the indicated additions is the Preferred Alternative for the Lake Whatcom Landscape Plan Final EIS.

Objective 1	Ensure no significant risk to public health, safety and resources, and tribal archaeological and cultural resources from forest-management-related mass-wasting events.
Mass-wasting	<p><i>Strategies:</i></p> <ul style="list-style-type: none"> • Timber harvest and road construction upon potentially unstable slopes (as defined in the “Slope Stability Assessment” and shown generally on Map G-2 “Potentially Unstable Slopes”) shall be carefully regulated. <ul style="list-style-type: none"> ○ Proposed activities on or adjacent to potentially unstable slopes shall be reviewed by the inter-jurisdictional committee who may make site specific recommendations. Inter-jurisdictional review means an annual sharing of plans for management activities; for each proposed activity there will be an on site review of the proposal by an inter-jurisdictional and inter-disciplinary team. ○ Proposed activities on potentially unstable slopes will require on-site evaluation by a DNR specialist to determine actual unstable areas. ○ No road construction or timber harvesting will occur on areas identified during the above evaluation as unstable. ○ Road reconstruction on areas identified by the above evaluation as unstable will consider inter-jurisdictional committee and specialists recommendations. ○ Harvesting or road construction outside of identified unstable areas, but within the mapped “potentially unstable slopes,” will consider inter-jurisdictional committee and specialists recommendations. • Slope stability assessment work generally identified “high hazard” and “moderate hazard” mass-wasting units (See Map G-1) within the potentially unstable slopes areas. Watershed Analysis Areas of Resource Sensitivity #1 is rated “moderate hazard”; ARS #2, 3 and 4 are rated “high hazard.” <ul style="list-style-type: none"> ○ Proposed activities on or adjacent to potentially unstable slopes shall be reviewed by the inter-jurisdictional committee who may make site specific recommendations. Inter-jurisdictional review means an annual sharing of plans for management activities; for each proposed activity there will be an on site review of the proposal by an inter-jurisdictional and inter-disciplinary team.

	<ul style="list-style-type: none"> ○ Follow Lake Whatcom Watershed Analysis mass-wasting prescriptions relating to timber harvesting. ○ On unstable slopes in ARS #2, #3 and #4 or areas identified as unstable above, new road construction shall be prohibited and old road reconstruction shall be limited. ○ Follow Watershed Analysis prescription for road construction in ARS #1. ○ Existing road reconstruction will follow Watershed Analysis road construction prescriptions in ARS #1, 2, 3 and 4. • In Smith Creek, large woody debris, which increases the risk of log jams and resulting debris torrents, will be cut into chunks to reduce debris build up, to provide for public safety of downstream residents.¹
Objective 2	Maintain and restore the sediment regime within the range of natural variability.
Roads & sediments	<p>Strategies:</p> <ul style="list-style-type: none"> • Follow Forest Practice Rules and watershed analysis prescriptions for road construction and maintenance. <ul style="list-style-type: none"> ○ No road construction during “wet conditions” (typically Nov. 1 – March 31) unless the contractor can demonstrate that protection of resources can be provided. • Minimize new road construction using harvest systems planning • No timber and rock hauling during “wet conditions” on DNR forest roads without surfacing or surfaced with non-durable rock, where sediment has the potential to deliver to streams. • Develop and begin implementation of a road maintenance and abandonment plan based on the specifications in WAC-222-24-050 and 051, within one year of the completion and approval of the landscape plan. <ul style="list-style-type: none"> ○ All orphaned roads will be inventoried and assessed relative to risk of failure and/or potential for sediment delivery. Mitigation work on orphaned roads will be done where a clear risk to public safety or potential for resource damage exists and accessing the site will not cause greater resource damage or public risk. ○ All identified road maintenance and abandonment work will be completed within 4 years of Board of Natural Resources approval of the landscape plan.
Objective 3	Protect and restore riparian and wetland habitat to sustain healthy native aquatic, wetland, and riparian ecosystems.

¹ This strategy is based on a negotiated legal settlement between DNR and residents in this area.

	<ul style="list-style-type: none"> The DNR is encouraged to avoid harvest in wetlands, consistent with current practice.
Objective 4	Maintain and restore the forest hydraulic regime for each sub-basin within the range of natural variability.
Hydrologic maturity	<p>Strategies:</p> <ul style="list-style-type: none"> Follow Lake Whatcom watershed analysis prescriptions relating to hydrologic maturity in rain-on-snow zones: <ul style="list-style-type: none"> Maintain a minimum of (692) acres of hydrologically mature (> 40 years) forest in the Olsen Creek sub-basin. Maintain a minimum of (1,200) acres of hydrologically mature (> 40 years) forest in the Smith Creek sub-basin. The DNR will evaluate the hydrologic implications to sub-basins of all sales with the inter-jurisdictional committee.
Objective 5	Maintain and restore water quality necessary to support healthy riparian, aquatic, and wetland ecosystems.
Chemicals	<p>Strategies:</p> <ul style="list-style-type: none"> Follow Forest Practice Rules and Forest Resource Plan Policy No. 33 (Controlling Competing Vegetation). Use the following prioritized application methods: 1) no treatment, 2) non-chemical and 3) ground-applied. No aerial application of herbicides. Select a cost effective method by considering the no treatment method first and then moving sequentially down the list. Follow Forest Practice Rules and Forest Resource Plan Policy No. 33 (Controlling Competing Vegetation) and 34 (Thinning, Fertilizing, and Pruning). Use prioritized application method listed in the strategy above. No aerial application of fertilizers. Proposed activities for vegetation control or involving use of pesticides or fertilizers shall follow principles of integrated pest management (RCW 17.15.005) and be reviewed by the inter-jurisdictional committee who may make site specific recommendations.
Objective 6	Maintain and restore a diversity of natural and managed functional habitat conditions to benefit native fish and wildlife species, particularly those identified in WDFW priority and habitat species (PHS).
Fish habitat Older-forest conditions	<p>Strategies:</p> <ul style="list-style-type: none"> Ensure all native fish species have access throughout their natural range at all life stages. <ul style="list-style-type: none"> Identify, prioritize, and replace fish-blocking culverts with fish-passage structures. Replacement will occur during planned management activities or during implementation of the Road Maintenance & Abandonment Plan. Retain riparian and wetland buffers and off-base unstable slope areas in older forest conditions, letting those not in that condition yet to grow into it. Protect all known bald eagle nesting, roosting and foraging sites. <ul style="list-style-type: none"> Follow Forestry Handbook Procedure PR 14-004-330 for protecting bald eagle nest sites and roosts, including the

Bald eagles	development of site-management plans for bald eagle habitat pursuant to Forest Practices Regulations (WAC 232-12-292).
Marbled murrelet	<ul style="list-style-type: none"> ○ Follow the HCP riparian and large, structurally unique tree retention strategies, which should result in increased abundance of large trees for bald eagle nesting and roosting.
Unlisted species of concern	<ul style="list-style-type: none"> ● Conduct Pacific Seabird Group (PSG) protocol surveys of all known reclassified marbled murrelet habitat to determine occupancy. <ul style="list-style-type: none"> ○ Protect occupied stands and develop a long-term conservation strategy for the North Puget Planning Unit, as required in the HCP. ● Follow specific species-by-species Forestry Handbook procedures. Procedures may change as a result of adaptive management. The following unlisted species of concern have been identified in Table XX as existing in or near the Lake Whatcom landscape and have Forestry Handbook procedures in place. Where current procedures do not exist, consult with the Region wildlife biologist. <ul style="list-style-type: none"> ○ Common Loon – see Forestry Handbook Procedure PR 14-004-240: Protecting Common Loon Nests. ○ Northern Goshawk – see Forestry Handbook Procedure PR 14-004-260: Protecting Northern Goshawk Nests West of the Cascades. ○ Pileated Woodpecker – see Forestry Handbook Procedure PR 14-004-290; Protecting Pileated Woodpecker Nests.
Uncommon habitats	<ul style="list-style-type: none"> ● Follow specific Forestry Handbook Procedures. The following uncommon habitats have procedures: <ul style="list-style-type: none"> ○ Cliffs – see Forestry Handbook Procedure PR 14-004-190: Protecting Cliffs. ○ Talus Fields – see Forestry Handbook Procedure PR 14-004-170: Protecting Talus Field. ○ Caves – see Forestry Handbook Procedure PR 14-004-180: Protecting Caves. ○ Balds – see Forestry Handbook Procedure PR 14-004-220: Protecting Balds.
Objective 7	Permanently retain green trees, snags, & down logs to support mature forest functions.
Snags, green trees, down wood	<p>Strategies:</p> <ul style="list-style-type: none"> ● Implement snag and green tree retention procedures on all harvest units, consistent with HCP and forestry handbook procedures. Procedures may change as a result of adaptive management. Current procedures specify: <ul style="list-style-type: none"> ○ Retain seven (7) percent of all trees that are 12” dbh or larger or 8 trees per acre, whichever is greater, as permanent legacy trees. ○ Legacy trees shall be dominant and co-dominant trees ○ Legacy trees shall include at least five windfirm green trees and three snags per acre harvested (subject to Dept. of Labor and Industries safety standards) ○ Choose as legacy trees large trees with structural characteristics important to wildlife and old growth remnants

	<ul style="list-style-type: none"> ○ One of these trees must be from the largest diameter class ○ One additional tree must be from the dominant crown class ○ Leave snags whenever safe and practicable. Retain snags that are at least 15" dbh and 30' tall. Give priority to large hollow snags, hard snags with bark, and snags that are at least 20" dbh and 40' tall. ○ If fewer than three snags per acre can be left, additional live trees will be retained so that the average per acre equals 7 percent or 8 trees per acre, whichever is greater.
Objective 8	Maintain or increase soil productivity and health.
Snags, Harvest methods	<p>Strategies:</p> <ul style="list-style-type: none"> ● Implement the strategies for snag and green tree retention above. ● Select harvest methods that maintain or facilitate establishment of productive and healthy forest stands. ● Avoid using ground-based harvesting systems on slopes exceeding 30% and on soils sensitive to compaction.
Objective 9	Preserve, protect, and restore significant historic, archeological, traditional current use and cultural resources.
	<p>Strategies:</p> <ul style="list-style-type: none"> ● Identify and protect cultural resources using the following DNR policies, procedures, and guidelines, as well as state and federal acts, rules, regulations, accords, agreements, and executive orders. <ul style="list-style-type: none"> ○ Implement DNR Policy P006-001 Historical, Cultural and Archaeological Sites, 7/31/96: “All department personnel will identify potential archaeological, historic and cultural sites/resources in the course of their normal duties. Discovered resources will be recorded and inventoried in coordination with the Office of Archaeological and Historic Preservation (OHAP) and/or the appropriate Tribes so that they can be protected to the full extent allowable by law. ○ It is the policy of the department that Forest Resource Plan Policy #24 “Identifying Historic Sites,” shall apply to all department managed lands. That policy states “The department will establish a program to identify and inventory historic and archaeological sites and protect them at a level, which, at a minimum, meets regulatory requirements....” ○ DNR Tribal Policy PO06-002, Jan. 16, 1991 as referenced in Appendix F of the 1992 Forest Resource Plan, in PO06-001, and as reflected in the Revised DNR Tribal Policy, June 1998. ○ 1992 DNR Forest Resource Plan: Policy #8 “Special Forest Products”; Policy #13 “Special Ecological Features”; Policy #16 “Landscape Planning”; Policy #19 “Watershed Analysis”; Implement Policy #24: “Historic and Archaeological Sites”: “The department will establish a program to identify and inventory historic and archaeological sites and protect them at a level which, at a minimum, meets regulatory requirements.” Policy #28 “Developing and Maintaining Roads”; Policy #35 “Implementation Policies: Public Involvement”: “The department will solicit

	<p>comment from the public, tribes, and government agencies when implementing the Forest Resource Plan and when revising policies contained in the document.”</p> <ul style="list-style-type: none"> ○ DNR Forestry Handbook Procedures: PR 14-004-030 “Identifying Historic Sites”; PR 14-004-010 “Identifying Off-base Lands”; PR 14-004-110 “Wetland Management”. ○ DNR Final Habitat Conservation Plan (September 1997) and by reference: (1) DNR DEIS (March 22, 1996), 4.9 Cultural Resources, pgs. 4-525-4-528; and (2) DNR HCP FEIS (October 25, 1996), p. 3-121 C. Cultural. ○ Washington State Rules, Regulations, Agreements: RCW 27.34 Archaeological and Historic Preservation; RCW 27.44 Indian Graves and Records; RCW 27.53 Archaeological Sites and Resources Act; RCW 43.21C.020 & WAC 197-11 State Environmental Policy Act; RCW 25 Office of Archaeology and Historic Preservation; RCW 76.09 Forest Practices Act; WAC 222 Forest Practices Rules; 1999 Forest & Fish Plan Appendices G: Cultural Resource Module, N2: DNR Cultural Resources Planning, O: Cultural Resources Management & Protection Plan; 1987 TFW Agreement; 1989 Centennial Accord. ○ Federal Regulations/Laws/Executive Orders: 36 CFR Part 800 Protection of Historic Properties; 42 U.S.C. AIRFA American Indian Religious Freedom Act; 33 U.S.C Clean Water Act; 16 USC Endangered Species Act; Title 16 U.S.C 1906 Antiquities Act; Title 16 U.S.C., PL 96-95 Archaeological Resources Protection Act of 1979; PL 101-601 Native American Graves Protection and Repatriation Act; PL 91-190 National Environmental Policy Act; as applicable to DNR HCP; 1971 Executive Order #11593 Protection and Enhancement of the Cultural Environment. <ul style="list-style-type: none"> ● Use the DNR Planning and Tracking (P&T) System, which links the user to DNR’s Total Resource Application Cross-Reference (TRAX) database system, prior to planning resource management activities to identify known Cultural Resources Sites, per DNR PR14-004-030 “Identifying Historic Sites”. ● When management activities involve or affect cultural resources, DNR will meet with the affected tribe(s) with the objective of agreeing to a plan for protecting the archeological or cultural value. (per WAC 2222-20-120) ● DNR will meet regularly with the affected tribe(s) to discuss plans or management activities per PO06-002 Tribal Relations Policy, January 16, 1991 and June 2, 1998)
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	<p>Strategies (cont) :</p> <ul style="list-style-type: none"> On a government-to-government basis, develop an agreement with interested federally-recognized tribes who consider the Lake Whatcom area as part of their Usual and Accustomed Area (U&A). The development of such agreements shall begin within one year of the Board of Natural Resources approval of the landscape plan. The agreement shall: <ul style="list-style-type: none"> Identify categories of cultural resources to be protected and specific protection requirements and/or guidelines for each category Outline a consultation process, including review timelines, for state lands actions such as: <ul style="list-style-type: none"> Timber sales plans Road maintenance and abandonment plans (RMAPs) Land exchanges Address consultation process for the development of, or changes to, DNR policies such as: <ul style="list-style-type: none"> DNR Forest Resource Plan Sustainable Harvest Calculation Commissioner policy(s) for working with tribes (Commissioner's Order) Forest Practices Other applicable policies Address other strategies under the objectives of this landscape plan to assure that conflicts with the protection of cultural resources are either avoided or mitigated to the extent possible. Address issues such as: <ul style="list-style-type: none"> Tribal access, including behind DNR-controlled gates, to cultural sites on state lands. Cultural materials with significant commercial market (e.g. cedar trees for totem poles, canoes, etc.) <p>Prior to implementation of the agreement described above, protection of traditional cultural resources identified during harvest planning will be guided by the protection needs and comments/recommendations in Table 5, Tribal Cultural Resources in the PDEIS Appendix D.</p>
Objective 10	Provide and facilitate tribal access to state managed lands for traditional cultural and religious practices and treaty guaranteed hunting and gathering.
	<p>Strategies:</p> <ul style="list-style-type: none"> Tribal access for hunting, fishing and gathering per Point Elliott Treaty of 1855 Section 5 Open and unclaimed lands. On a government-to-government basis, develop an agreement that addresses tribal access (see government-to-government agreement under Objective 9 above).

Objective 11	Create and implement a sustained yield model specific to the Lake Whatcom watershed that encompasses the revised management standards and that is consistent with the sustained yield established by the Board of Natural Resources.
	<i>Strategies:</i> <ul style="list-style-type: none"> • The average rotation age is consistent with Forest Resource Plan policy as specified by site and species. • Harvest trees in dense stands (commercial thinning), before trees die from stand competition, to capture revenue that would otherwise be lost.
Objective 12	Maintain or improve commercial forest productivity and health.
	<i>Strategies:</i> <ul style="list-style-type: none"> • Select a harvest method (regeneration, thinning, partial cut) that maintains or facilitates establishment of productive and healthy forest stands. • Avoid using ground-based harvesting systems on slopes exceeding 30% and on soils sensitive to compaction. • Following regeneration harvests, reforest with a majority of Douglas-fir intermixed with Western red cedar at all elevations in the planning area. • Pre-commercially thin overstocked stands. • During the first two decades of the plan, accelerate the harvest of mature and over-mature hardwood stands on sites better suited for conifers. • Control competing vegetation that would dominate crop trees or significantly inhibit growth in a stand.
Objective 13	Cultivate higher value commercial forest products.
	<i>Strategies:</i> <ul style="list-style-type: none"> • Plant and encourage growth of western redcedar to develop pole products. • Prune, to increase wood quality, where it will generate a higher economic return. • Consider tree selection during commercial thinning that promotes future log quality.
Objective 14	Develop and maintain a transportation network that facilitates commercial management activities.
	<i>Strategies:</i> <ul style="list-style-type: none"> • Develop and begin implementation of a Road Maintenance and Abandonment Plan within one year of the completion and approval of the landscape plan.

	<ul style="list-style-type: none"> • Use harvest system planning to identify necessary roads and reduce the total length of new road construction. • Pursue a viable alternative to the lower portion (sec. 6 & 7, T.37 N. R.4 E.) of the existing LM-2000 road as the primary timber haul route for harvests on Lookout Mountain. Maintain the existing road as needed for access to communication sites, fire access and administrative use. • Abandon roads to Forest Practices standards when they are no longer needed for management. • Install and maintain gates where necessary to reduce road maintenance costs, resource impacts, vandalism, and garbage dumping.
Objective 15	Maintain and increase lease revenue from existing and future communication sites.
	<p>Strategies:</p> <ul style="list-style-type: none"> • Continue to lease tower and building space to interested parties. • When possible, review rental rates. Increase rates if market conditions allow. • Seek new communication site customers.
Objective 16	Consider opportunities to generate revenue from oil and gas exploration.
	<p>Strategies:</p> <ul style="list-style-type: none"> • <u>Where DNR controls the oil, gas, and mineral rights,</u> limit exploratory drill sites to surface locations outside the watershed. Subsurface diagonal drilling allowed. • If sufficient oil or gas reserves are found, allow development of the resource if compatible with other landscape objectives. Production drill sites shall be limited to surface locations outside the watershed. Subsurface diagonal drilling allowed.
Objective 17	Consider the marketing of special forest products such as evergreen boughs, salal greens, moss, and native plants, as appropriate.
	<p>Strategies:</p> <ul style="list-style-type: none"> • Ensure potential products, if sold, will not negatively impact other resource objectives or traditional tribal use.
Objective 18	Consider other revenue generating mechanisms.
	Strategies:

	<ul style="list-style-type: none"> Consider Lake Whatcom a preferred location for the following: <ul style="list-style-type: none"> Green certification Carbon sequestration Lease(s) Conservation easement Maintain long term public ownership of forest lands Reconveyance Exchange, transfer or sell trust lands. Recreational fees.
Objective 19	Manage dispersed, low impact recreation.
	<p>Strategies:</p> <ul style="list-style-type: none"> Public use and recreation is allowed in accordance with Policy No. PO10-002 (Public Use on DNR-Managed Trust Lands), provided resources and assets are not at risk. As budget allows, develop a comprehensive recreation plan in cooperation with specific user groups such as the horseback riders, mountain bikers, hikers and other interested parties that minimizes impacts to trust resources and assets. Limit access to streams, riparian areas, and wetlands by motorized vehicles through permanent road closures, vehicle barriers, and public education and enforcement.
Objective 20	Reduce the visual impact of forest management activities in high visibility areas as shown on Map S-1.
	<p>Strategies:</p> <ul style="list-style-type: none"> Follow Forest Practice Regulations and Forest Resource Policy No. 32 (Green-up of Harvest Units), in conjunction with Policy No. 16 (Landscape Planning). On all the state trust lands, including “moderate visibility” areas on Map S-1, the following guidelines will be used for even-aged harvest units: <ul style="list-style-type: none"> Harvest units will not exceed 100 acres except in the case of emergency salvage operations due to extensive "blowdown", insect or disease infestation, or public safety concern. No harvesting within 300 feet of another harvest area if combined acreage of harvest areas exceeds 100 acres Harvest units with trees greater than 4 feet high are considered “greened-up.” In “high visibility” areas on Map S-1, the department will consider the size, shape, and location of harvest units and distribution of leave trees when planning timber sales.

	<ul style="list-style-type: none"> Disperse regeneration harvest activities temporally and spatially across the landscape.
Objective 21	Support stewardship education opportunities and partnerships that address community needs.
	<p><i>Strategies:</i></p> <ul style="list-style-type: none"> Cooperate with and provide educational opportunities to requesting educational institutions and other interested parties consistent with the department's public use policy No. PO10-002. DNR will continue to be an active participant in the Forest Practices Timber Fish Wildlife (TFW) process and the Lake Whatcom Forestry Forum.
Objective 22	<u>Develop an inter-jurisdictional committee to work with DNR to implement the landscape plan.</u>
	<p><i>Strategies:</i></p> <ul style="list-style-type: none"> <u>The DNR and the Lake Whatcom DNR Landscape Planning Committee requests the City of Bellingham, Whatcom County, and Water District 10 appoint members as they see fit as an interim inter-jurisdictional committee, consistent with E2SSB 6731, to represent the local needs for resource protection wherever review by, or consultation with, the inter-jurisdictional committee is referred to in this document.</u> <u>The DNR will work with the Lake Whatcom Management Committee to develop and sign an agreement regarding the relationship between the signatories and the inter-jurisdictional committee in implementing the landscape plan. Discussions will begin as soon as mutually agreed upon after adoption of the landscape plan.</u>

Summary of the Public Comment Process for the DEIS

Several key issues were discernable from DEIS public comments and discussions of the Lake Whatcom DNR Landscape Planning Committee. (See Appendix C for a complete list of comments and DNR responses and Appendix D for the list of those who submitted comments on the DEIS.) A summary of the key issues is provided below.

- **Inter-jurisdictional Committee:** During work sessions with DNR to develop the DEIS Preferred Alternative, Committee members stressed the importance of an ongoing inter-jurisdictional committee (IJC) to review proposed land management activities under the landscape plan. Committee members discussed at length the need for an active IJC in order for the community to have confidence that public safety and water quality concerns are fully considered in DNR's proposed land management activities within the watershed. Some of those who submitted public comments said they wanted an IJC with independent scientists who would have the authority to stop "risky activities" (not defined) on potentially unstable slopes, funded by logging revenues. The Lake Whatcom legislation, E2SSB 6731, states that the department "shall consult with the Lake Whatcom Management Committee on proposed timber harvest and road management activities" and that the IJC "may recommend restriction on timber harvest and yarding activities on a case-by-case basis." Under the Preferred Alternative, timber harvest and road construction on or adjacent to potentially unstable slopes would be carefully regulated and subject to on-site review by the IJC.
- **Harvest Level Variations during Plan Implementation:** The DEIS contains information about the average harvest levels over the 200 years used as a modeling period for this landscape plan. This information was identified as representing the 200-year *average* and is not intended to imply that harvesting will occur at the same rate each year throughout the planning period. There currently are many stands in the 60-100 year age classes and fewer in younger and older age classes, so the harvest modeling projects a higher harvest rate in the near term since there are more stands of harvest age available, relative to later time periods. The variability in harvest level created confusion for some DEIS readers, who requested that DNR show its "actual logging plan."

The tables below are consistent with the DEIS discussion of the average harvest levels for the entire planning period. The first table shows the average harvest volume per year, in 20-year intervals, for the modeling period. The second table provides additional detail about the projected average annual acres of regeneration, thinning and partial cut harvests in 20-year increments for the modeling period.

**Annual Harvest Volume Per Year
by 20 year period, mmbf**

2001- 2020	2021- 2040	2041- 2060	2061- 2080	2081- 2100	2101- 2120	2121- 2140	2141- 2160	2161- 2180	2181- 2200
3,356	6,188	1,470	3,427	3,549	3,311	2,797	948	1,126	2,113

**Annual Harvest Acres Per Year
by 20 year period and harvest type**

	2001-2020	2021-2040	2041-2060	2061-2080	2081-2100	2101-2120	2121-2140	2141-2160	2161-2180	2181-2200
Regen Cut	75	97	35	72	8	29	74	19	23	4
Thinning Partial Cut	11	24	17	61	85	39	3	21	40	58
	0	0	0	2	81	0	0	0	0	44

Note: The numbers in these tables are approximate, resulting from modeling analysis, and used for planning purposes only. Actual annual harvest levels will vary. Volume is inventory volume; results not field verified.

Again, it must be recognized that the table shows *average* numbers of acres over a 20-year period, and the actual harvest level for an individual year within the 20-year period will vary from the average. The more detailed information for 20-year increments was shared with the Committee during work sessions and with the analysts who evaluated environmental impacts under the alternatives presented in the DEIS, but it was not included in the DEIS.

- **Oil and Gas Exploration:** Some comments on the DEIS stated that no gas or oil exploration should be allowed under the landscape plan covering DNR-managed lands or anywhere else within the Lake Whatcom watershed. The analysis for the PDEIS and the DEIS found no significant environmental impacts from the landscape plan proposal, which includes the mitigation measure of a no-surface-entry requirement and restricts exploration to subsurface diagonal drilling from outside the watershed.
- **Activities on Potentially Unstable Slopes:** Public safety and water quality have been key considerations in the landscape planning process. Conducting any land management activities on potentially unstable slopes has remained a concern for some Committee members and some citizens who commented on the DEIS, who would prefer that DNR stay out of these areas entirely. The Preferred Alternative carefully regulates harvest and road construction on potentially unstable slopes. Proposed activities on potentially unstable slopes will require on-site evaluation by a DNR specialist to determine actual unstable areas, and no road construction or timber harvests will be allowed on those areas identified as unstable through this evaluation. In addition, proposed activities on or adjacent to potentially unstable slopes shall be reviewed by the IJC, who may make site-specific recommendations.
- **Reduced Trust Revenues:** The projected revenues generated through implementation of the FEIS Preferred Alternative would be significantly lower than those estimated for the No Action Alternative. For the entire 200-year modeled planning period it is estimated that revenues under the Preferred Alternative would total \$177,210,000, a reduction of \$160,182,000 from the anticipated revenues of \$337,392,000 under the No Action Alternative.